

# Engineers' GATEPOST

THE UNDERGRADUATE PAPER OF THE E.S.S.

VOL. 13-OZ.

EDMONTON, ALBERTA, THURSDAY, JANUARY 27, 1955

PRICE \$2:15

## ENGINEERS IN DEMAND BY INDUSTRY

According to statistics compiled by the Engineering Institute of Canada, 1,392 Engineers will graduate from Canadian universities in 1955. Alberta, one of 13 schools offering a degree course in engineering, will contribute 89 or 6.4% of this total.

In an analysis of cross-Canada registrations by courses, civil engineers are the largest group with 391 graduates. There are 240 prospective electrical engineers, 171 chemicals, and 40 miners. Petroleum engineering, a course exclusive with Alberta, should graduate 17 this term.

Employment prospects for all groups are good, according to word received from the campus branch of the National Employment Service. The availability of jobs for the 1955 graduate will compare favorably with the opportunities last year. Starting salaries will show no decrease over those offered in 1954. A few companies have raised their initial salary by as much as \$50 per month but this is not general.

Western Canada industry will absorb the majority of U of A engineering graduates. In the past, the employment service has received inquiries about employment opportunities with firms in the east, but with some exceptions, notably electricals, students prefer positions on the prairies. Petroleum engineers find employment best in Alberta, whereas the openings for mining engineers exist in every province but Alberta.

With demand for engineering graduates still exceeding the supply, Canadian firms are sending representatives to the campus in search of engineering talent.

Through personal interviews the student and the industry take a first look at one another. Mr. L. Morgan, director of the University Employment Service, stresses the importance of these interviews and advises, "Company representatives consider, as a preliminary qualification, personal qualities that would enable an individual to work with and through other people. One way in which these qualities are developed is through conscientious participation in student organizations." He added that first-class marks were not to be underrated but a student with marks of a general standing plus a favorable personality was an eligible candidate for most companies.

## No News Is Good News

It was the night before the Engineers' Ball. She'd made this date before Christmas to be sure that she had done at all this year.

She was a small-town girl in the big city for the first time. You know the old story. She waited nervously. It was going to be the first time . . . and she had just met him. Could she trust him? She patted her hair, straightened her dress. She was very, very nervous.

Her friends who had already had the experience told her how much it would hurt. But she had to lose it some day. After he had convinced her the day she made the date, she had sworn to herself that she would never open her mouth. She thought she would be too ashamed. Now she could see his shadow coming toward her. Maybe he hadn't seen her yet. Then she could still run away. . . . "Hello, Miss Boop; if you will kindly come in now, I will pull out that bad tooth."

## LONG MAY SHE REIGN . . . .



The Lord Mayor of Coventry, Warwicks, England, very kindly supplied this picture of the statue which stands in the central park of his city. Although the surrounding area was badly bombed during World War II, Lady Godiva remained unscathed.

## Lady Godiva--Patron Saint Of Engineers At U. Of A.

Lady Godiva is the heroine of a well-known English legend. Her husband, the Earl of Leofric, was Lord of Coventry about 1040 A.D. and was making himself increasingly unpopular with the townsfolk by taxing them heavily. Lady Godiva, on the other hand, was well liked for her kindly help to the poor and the sick in their time of need.

After the townsfolk had pleaded unsuccessfully with the Earl to lighten their tax burdens, they approached Lady Godiva, seeking her assistance in making him change his mind. As the legend goes, Godiva argued for days against the merciless baron, and finally in desperation suggested that she ride through the village streets in the nude. The Earl, doubting that his wife would carry out such a drastic measure, agreed to cut down the taxes if she did.

Lady Godiva sent out a proclamation asking all the people to remain at home on a certain day and not even look out of their houses. On the appointed day she mounted a white steed and rode through the streets, her naked body covered only by her long hair.

After this famous ride, the Earl did cut down the taxes for the people of Coventry, who have since been indebted to Lady Godiva.

For many years it was customary to celebrate the legend at an annual fair. At numerous of these fairs, when a suitable actress could be found, the nude ride was re-enacted. The last time this occurred, in 1937, the London model who played

Godiva's part and the promoters of the event were jailed.

This last action shows the effect of a prudish society misconstruing the intentions of a noble woman. The very people she helped have turned on those who seek to carry on her great ideals.

The Engineers have chosen Lady Godiva as their patron saint since she is a shining example of a person who strove for the betterment of mankind. An Engineer is dedicated to "harnessing the natural resources to rear the structure of civilization". In Godiva's case it was a matter of unharnessing natural endowments to save her people from ruthless taxation. LONG LIVE LADY GODIVA!

A girl was walking along a country road and almost stepped on a frog. She was about to go on when the frog began to speak.

"I have not always been a frog," he croaked. "I was once a tall, dark, handsome man, but was transformed into this creature you now see by a wicked and magical genies. The spell can only be broken if I spend a night under the pillow of a beautiful girl." The girl, of course, was skeptical, but the pleading eyes of the unhappy frog caused her to take him home that night and put him under her pillow.

Sure enough, when she awoke the next morning, there beside her she found a tall, dark, gorgeous hunk of man.

Well, you know, to this day her mother does not believe that story.

## Mardi Gras Dying

"This year's Mardi Gras was the last of a series of dull costume brawls," according to Santa Wishing, prominent ASSUS wheel. "The Mardi Gras was as exciting as the law library on Sunday, and the ASSUS doesn't think that there is anything about it that makes it worthwhile to support it while it loses money for our organization. Why, it was so sluggish that there were even some dancers asleep on the dance floor, in addition to all of the people resting everywhere there was something solid to lean against."

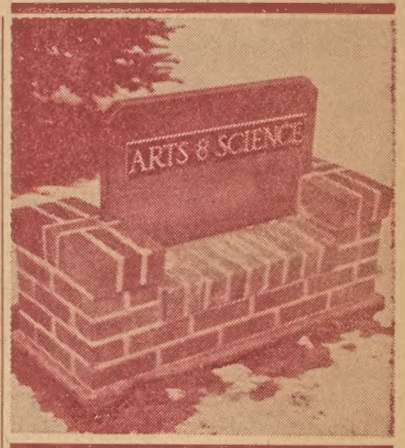
A real problem with the Mardi Gras seems to be in getting king candidates. In spite of the girls not being very fussy, it wasn't until the Monday before the dance that they could find anyone to run for king. Even then the four fellows ran under the stipulation that they were guaranteed a party by the engineers. In years past, the Arts and Science Students' Underworld Society has given the engineers enough money to pay for the expenses of kidnapping and keeping the kings for a few days. The kidnapping has been the only thing interesting associated with the Mardi Gras, and it has at times brought out as many as 150 people to the dance. However, the kings have been drinking more and more, and the dance has been going more and more into the red, so this year the ASSUS decided that they couldn't afford a kidnapping, along with all of their other functions being somewhat financially unsound. The ASSUS executive begged the ESS to sponsor the kidnapping of the kings so that the dance might possibly attract a few unknowing freshmen. The suggestion was squelched by the treasurer of the ESS in his statement as follows: "I'll be damned if I see any reason to sponsor a party for that bunch of booze hounds. If they would play poker with us, we could pay for their drinking that way, but all they want to do is get roaring."

The ASSUS thought of just about everything possible to make their dance a success. They approached the nurses and proposed an artsmen-nurses dance. After looking the artsmen up in the Kinsey report, the nurses decided that they were satisfied with engineers.

One ASSUS member suggested that Aggie music would not only cost nothing but might bring out the 100-odd plowboys of the campus. This saving would leave enough money for a kidnapping party. The girls would then be able to get king candidates. This proposal was defeated when it was pointed out that the excessive fertilizer stains on the aggies' boots might ruin the drill hall floor.

The best suggestion was that, instead of having a king contest, the Mardi Gras feature the murdering of the current Gateway editor. Thus the Mardi Gras could become the most joyous evening of the campus year. It was felt that only the meds would have the qualifications necessary to carry out a public service such as this, but when approached they declined, saying, "The undergraduate course in medicine is not the proper place for the courses required for a job of this type. May we refer you to the O.A.C. at Guelph?"

An ASSUS member thought that Tuesday's Gras could be renamed "The Engineers' Ball" and that some freshmen might be fooled into thinking they were getting the real thing. This went down to defeat when another member noted, "No one can be that stupid. We would have to run



If more conclusive proof is required of the arts and science faculty's recent demise, witness the cancellation of their annual formal a week ago, and the tombstone shown above. This memorial is located in front of a prominent local building.

a queen campaign if we were to fool even the temporary license students."

The Gatepost is very concerned over the fate of the Mardi Gras. If the ASSUS wants to have a successful dance, possibly we can be of some help. We feel that there is one obvious way to make the Mardi Gras a success. By claiming that the dance is to be restricted to engineers, nearly everyone on the campus will buy, beg or steal to gain admission, even though it is only the same old Mardi Gras.

## Research Continues

Ever since the beginning of man, the Engineer has distinguished himself by his great achievements and his humane and noble conduct towards his inferiors. The wheel, the harnessing of fire for human use and the first house are just infinitesimal specks on the Engineers' honor sheet.

As bibbling artsmen and lawyers have started wars and caused numerous crises with their bungling ways, the quiet, efficient and modest Engineer, staying in the background, has taken over and brought order out of chaos. Nor has he kept his fine management and discoveries to himself but has distributed them all over the world for the benefit of all.

However, Engineers the world over have sadly neglected a serious problem which has plagued approximately one-half of the world's population. They have not solved the problem of how to build a comfortable, non-slip, strapless evening gown. Now, at last, this problem has come under the Engineers' scrutiny and research, with Alberta Engineers leading the rush to the solution. (We must add that strapless gowns have been under the Engineers' scrutiny for centuries, but certain bare facts clouded the fact that a problem was present.)

### ASKED WRONG PEOPLE

Alberta Engineers first approached the subject with a questionnaire in which they asked for observations and possible solutions. Engineers brought forth many useful suggestions. Unfortunately, we magnanimously included artsmen and lawyers, among others, which was a

See 'STRAPLESS' Page 3



## The Dean's Message

The text for these comments has been selected as "The Trouble with Engineers". It is capable of a variety of interpretations. It could refer to the daily routine in the Dean's office. Or possibly it could be related to the peculiarly undeveloped sense of humor as evidenced in the average extra-curricular writings of the breed.



Still again, it might be considered in relation to the Christmas test results. If these appear to be the worst in the history of the faculty it would seem obvious that the blame should be saddled onto recent changes in the high school curriculum rather than to the degree of achievement of each individual student. But some might even surreptitiously suggest that the quality of the instruction has deteriorated somewhat.

Fortunately, on this last point, definite data are available. A group of instructors imbued with the experimental approach selected a very old test paper for use this year. The results were astounding. The class average in 1954 was 5.2% higher than in 1939 on the identical test paper.

To the group of instructors concerned, this constituted irrevocable proof that the calibre of instruction has improved not less than 5.2% during the past fifteen years. However, any discerning young Engineer capable of achieving a pass mark in Math. 2 will recognize an infinite variety of other mathematical possibilities. Let the choice be yours. But, whatever it may be, I would remind you of the experience of the first-year student who found himself short of cash. He hadn't heard of the Student Assistance Act, so he decided to economize by purchasing an overcoat at a second-hand store. He returned the next day to complain that it was full of moths. "What did you expect for \$4.95?" asked the dealer, "canaries?" In other words, one gets in proportion to what one gives.

Returning to the text, I have just received from one of our Engineering graduates of a few years ago a copy of the current issue of "Harper's Magazine". He drew my attention to an article on page 41 entitled "The Trouble with Engineers". This is the source of our text. May I commend the article to you for amusing and instructive reading? It could be useful in whiling away the time during the vigil of protecting a queen while the young lady keeps up-to-date in her assignments in Psychology X—possibly.

The author discusses the current shortage of Engineers, the fact that Russia is producing a far greater number than is the U.S.A., and the confusion in the minds of the public as to what an Engineer does. He also analyzes the "Engineering mind" and the thought that "the Engineering curriculum is a thing of enduring and beautiful perfection".

He warns against the training of "skilled barbarians"—"the specialist tightly fitted into his own slot and serenely indifferent to the 'unscientific' turmoil in which the others live". He makes a plea "for more exposure of embryo Engineers to economics, literature, law, psychology, history, political science, and as much purely general information as they can absorb".

The article ably presents a most challenging problem presently facing the Engineering profession. That is, are Engineers to broaden their interests into non-technical fields, or are they to become more highly specialized technically?

To me it is significant that my friend who passed the article along is building himself a successful career in a highly specialized field—one in which only a very small percentage of the Engineering profession are adequately

## THE GATEPOST



Published annually by the Engineering Students' Society at the University of Alberta.

Articles enclosed express the opinions of the staff of the Gatepost, but not necessarily those of the whole Engineering Faculty.

Office: Telephone: Thanks to the inefficiency of the Edmonton Telephone System, we haven't got one. Our name is on the list, so we may get one in four years!

Editor-in-Chief..... Fred E. Parkinson  
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Cartoonist..... Bill Curtis  
Advertising Manager..... Mike Leenders  
JUG Editor..... Hiram Walker  
Sporty Editor..... Dave Smith  
Makeup Editor..... Bob Aberdeen  
If I could think of any more names to attach to "Editor", I would put them in too.

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## Meds Lament

Oh, sad indeed is the house of medicine on the campus of the University of Alberta! The recent issue of Getaway has proven to be the downfall of a once-noble faculty.

We realize that Getaway was accepted with mixed feelings on the campus, but the worst shock came when a scholarly group of first- and second-year med men gathered for a colloquium in the SUB cafeteria and came out with the resounding statement that our beloved Lady Godiva, as pictured on Getaway, was a man! Had Getaway been a publication of the white buck boys, a fairy tale like this might be acceptable, but Engineers—never!

However, as was later proven by one of our number, our Godiva was in fact a very charming young woman. This only adds insult to injury for the meds. After prerequisite courses in high school and pre-med years at university in biology, zoology, etc., along with their intensive anatomy courses in first-year medicine, the poor maladjusted boys cannot tell a man from a woman!

I have been led to believe that the anatomy course is very thorough in all the intricacies of the human body. However, it is obvious that no first-hand knowledge of the outward appearances is available in that department. It would seem that it is merely a case of not being able to see the forest for the trees.

I made a quick perusal of both of Dr. Kinsey's recent books and failed to find any classification for this type of person; perhaps it might come under the heading of adolescents.

qualified. In my judgment, a more general educational background can be no substitute for a high degree of professional proficiency. But perhaps both are essential.

The reconciliation of the two opposing views will take time. It perhaps could be achieved by the present group of students. The challenge is to you.

R. M. HARDY, Dean.

P.S. "Harper's Magazine" is available at most newsstands—at the end where there is no crowd. My copy has been loaned to a colleague; maybe you can borrow it from him.

## Edmonton's West End Bridge



Students who live in Edmonton's west end are probably looking hopefully at the remaining parts of the 124 Street or West End bridge. When completed it will undoubtedly save them many hours of bus-riding up-town, then back to the university via the Fifth Street bridge. Civil Engineering students should also have an interest in this bridge, but from a different aspect.

Two professors from the Civil Engineering department, Dr. R. N. McManus and Dr. G. Ford, were instrumental in its design. Along with his full-time teaching duties at the university, Dr. McManus heads his own consulting firm, which was commissioned to design and prepare plans and specifications for the structure. Dr. Ford assisted with the computations for and design of the foundations and piers.

The bridge is of the conventional continuous type, with seven spans. The five centre spans are 146 feet each and the two end spans are 110 feet each, making the total distance from end to end 950 feet. It is 60 feet wide and provides for four 11-foot lanes of vehicular traffic and one six-foot pedestrian walk.

From the perspective drawing above, it might seem that the main spans are of an arch type of construction. This aesthetic effect is created by the use of parabolic haunched girders. The deep haunches in the girders at the piers concentrate the load-carrying capacity at the ends of the girder, and thus the deck of the bridge, acting as the flange to the girders, contains the principal girder reinforcement.

Because of the low temperatures which may occur in Edmonton, and the shrinkage which takes place when concrete sets, the bridge is

broken into three parts to distribute the contraction. These breaks occur at each abutment and 301 feet from each abutment. The interior breaks consist of linkage-type hinges which are located at dead-load points of contraflexure and will permit rotation and translation.

The analysis of the structure, including all information for influence lines, was carried out by means of moment distribution. An original and highly efficient combination of column analogy, Simpson's rule and numerical procedures helped greatly with the basic calculations.

Construction of the piers and foundations was done, using a new design. Rather than pouring the foundation and pier as one solid piece of concrete, they were separated by a four-inch layer of asphalt board. A solid connection between the two was effected by placing a 24 wide-flange section such that the bottom 10 inches and bottom flange was imbedded in the concrete of the foundation, the centre four inches of the web in the asphalt board layer, and the top 10 inches and top flange in the pier. Since the asphalt board can be compressed slightly, the pier can rock by simply bending the web of the beam. It is this last part of the design that is entirely original.

Now, the question that is in everybody's mind, "Why did this bridge fall into the river?"

On that fateful day in August, last summer, the work on the bridge was progressing as favorably as the weather allowed. The girders up to the bottom of the deck were poured, across the entire span, and the deck itself was poured from the north end out as far as the first hinge. The whole structure was supported by falsework built up from piles driven into the river bed. Concrete in the various members varied in age from four days to fourteen days. Since concrete is designed on the basis of its strength obtained after twenty-eight days, that in the bridge had not reached the required strength yet, or was still "green".

Unseasonal rains in the North Saskatchewan River catchment area caused the river to rise. When the flood reached Edmonton it was about ten times the normal August flow and was the largest flood ever recorded here. The river carried with it broken trees and debris that piled up against the falsework. Finally the falsework could withstand the strain no longer and collapsed.

As mentioned previously, the principal girder reinforcement is contained in the deck concrete over the piers. In the area where the deck was poured, the bridge showed no signs of distress when the falsework washed out. However, in the portion of the bridge nearer the south end, the deck was not poured and the concrete was quite green, which combined to cause the girders to sag unsatisfactorily or collapse completely.

The bridge construction will be continued and completed according to the original plans and specifications as soon as it is safe to put new falsework into the river.

## Meds' Downfall

### The Getaway



Nurses' Residence Erupts—  
Girls Scared to Go  
Getaway News  
Editor: [Name]  
Publisher: [Name]  
[Address]  
[Phone]

Getaway was published Nov. 19, 1954, as part of the publicity campaign for the Engineers'-Nurses' dance, "The Survival of the Fittest". Although not officially authorized, Getaway served its part in helping to make this dance one of the best yet on this campus.



From The Honorary President Of The E.S.S. . . . .

A few remarks of this nature were heard as the opening of a new term brought the results of Christmas examinations to more than 700 Engineering students. It seemed as if, as usual, a few of the examinations had been like the wave that overturned the boat. Some survived but many were wallowing in the sea, to be fished out by the profesor or unavoidably left to drown.

But the stinging realization to this observer is that many of the wet ones didn't mind being wet because they were all in the water together. The use of this type of conscience salve is treacherous.

The year's end is a traditional stocktaking time. It is appropriate that the individual student should take measure of himself, not as a prelude to a pile of fanciful resolutions but as an honest appraisal of his ability to meet his problems. When the data including the examination results are assembled, each man should define his own situation, resolve his problems, decide on a practical plan of action and then execute that plan. If his confidence is shaken or boredom is in command and self-analysis is an inadequate cure, competent help should be obtained. Continued worry is nothing more than inefficient thought.

Perhaps by now you are casting a suspicious look at a professor or two with the thought that "I'm not stupid; I don't deserve marks like this." Stupid is an adjective which is inappropriate to any university student, but the production of the low mark is not easily explained. The responsibility of Engineering education to the public, industry, and the profession it serves determines its aims and standards. The responsibility of Engineering education to the individual student determines its methods. Since each teacher has a part in establishing the aims and standards, he must challenge himself honestly to live up to those goals and at the same time inspire the student to co-operate and absorb the proper amount of knowledge. But what of the student? Teachers vary in their definition of an ideal student. It

is easy to recognize the pleasure of working with the outstanding man. However, a real teacher is more concerned with simple qualities such as intelligence sufficient to graduate, a desire to learn and a determination to make the best scholastic showing commensurate with a reasonable expenditure of energy on other phases of campus life.

I have noted two serious concerns, first the low mark, and second the apparent complacency which sometimes attends the reception of that mark. An individual scholastic performance is important regardless of class average, class mood or new year fashions. Every man in his first or second year should take stock now, not in March, and prepare to show his real ability on the next tests. Every man in his third or fourth year must do the same but, as well, he must foresee another hurdle, namely, obtaining the best job for himself as a starting point for his professional career.

It is reassuring indeed that there are so many positions in industry for young Engineering graduates. But no one should cruise through the narrows of the interviewing room without a course charted, nor sit hopefully through the interview like a model bulldozer on a toyland counter waiting to be wrapped up for some lucky boy. The best position and perhaps any good position must be attained by showing abilities, a desire, a zest for accomplishment and an eagerness to start.

In some respects the technical world is small. The graduating Engineer of any university in any country should not forget that he may work with men from any part of the world. This is a desirable intermingling of technical men but it is also one which leads to comparison and competition. Remember, too, that a young graduate represents a substantial investment by industry and that investment risks are carefully weighed.

There are certainly many opportunities for graduating Engineering students, but there are also many students in Canada and elsewhere. Did you ever look at the toys in more than one toyland before choosing? Pull upward on your marks, get a gleam in your eye and start building for a successful professional career now.

A. LEE SCOTT  
Professor of Chemical and Petroleum Engineering.

LOSES DIGNITY, ETC.

Just what are the problems that we face? Many a sympathetic Engineer has blushed, along with his charming escort, as her dress and dignity deserted her while doing a stately, refined Charleston at the elegant Engineers' ball or even when sitting in the back seat of a car which was jolting and bumping over Edmonton streets.

The problem, therefore, is to design and fabricate a strapless gown which will never embarrass the wearer or her escort, at least while in the company of others.

Problems in research include such obstacles as the present weather, the abolishment of the Pembina forest, and female morals. A lack of suitable subjects at U of A will be remedied by the opening of a donor system for numerous willing nurses.

LOTS OF HELP

Professors Longworth and Ford have done much to assist the researchers with their Strength of Materials course, while Casanova Russell and Romeo Cooper have helped with their Strength of Morals course.

At present, work is progressing on the following subjects:

Creep, which is exceedingly common at high temperatures and pressures. This phenomenon is proving very difficult to combat, according to the reports received from the testing grounds where eager Engineers and their willing guinea pigs are busily engaged in research. Hat and corsage pins have proved to be alarmingly inadequate in stopping creep.

Stretch is a very important factor in the design. This usually follows a yawn in the small hours of the morning and can prove to be disastrous. The material sought for here obviously must have a high modulus of elasticity. Although several materials have been uncovered, we must be sure of our ground before passing on to the next mountainous problem, so research goes on.

A small group has been working on a new beam theory, but at the moment it would appear that they are far removed from the points in question. Also, none of the beam equipment available here is broad enough.

Uniform and concentrated loads are being worked on, and results here have proved quite interesting. The bending moment has brought out several points of more than passing interest to the Engineer.

The hysteresis curve produced from data obtained from subjects subjected to the jitterbug and indoor rugger tests have opened the Engineers' eyes wide.

Strain hardening is quite evident in many experiments, according to the Engineers conducting them.

It has also been discovered that, within limits, Hooke's law (stress varies as the strain) is applicable. As yet, no definite limits can be set. Also, it has proved impossible to get a definite yield point, there being a great variance here. Breaking stress has also varied greatly.

Those analyzing the present structures say that they are a horrible tangle of wire, bone, slats and silk. One Engineer likened these structures to the fine arts department's modern painting. Analysis has proved easiest by the methods of opportune moments, and particularly by the method of substitute members. Many Engineers feel they have a solution to the problem in using

substitute members for the truss, but most of the subjects seem to disagree. Many of the structures have proved to be indeterminant.

The sneeze test is not under way as yet, due to material shortage. However, as the subject is further uncovered, there is no doubt that this test will soon be in full swing.

PROBLEM IS DEEP

This report may not seem to show any great advance in the solution of the problem, but the subject must be gone into fully by every Engineer. The problem is deep and must be viewed from all angles. No Engineer wants to fail on this, and so must check and double check. This factor, coupled with the fact that we are all deeply interested in the problem, shows us that no solution can be seen for the near future and that research on it will probably carry on for many more years.

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Strapless

(Continued from Page 1)

complete waste of time.

One artsman proposed straps, while a squeaky-voiced lawyer suggested high necklines (i.e. the ears).

An ag, questioned while milking a cow, looked at the animal thoughtfully and said, "Duh! J-j-just wear long s-s-skirts. Bessie don't use no strapless bra."

ONE CONCLUSION

The results of this questionnaire were read at a general meeting of Alberta Engineers. One definite conclusion was reached:

1. That much more research is necessary.

The meeting was adjourned by a stampede of Engineers to the exits, eager to start their research and to shine more light on the subject.

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**BARBARA BEDDOME**  
Third and Fourth Year Petroleum's Canadidate

**LORIE HODGSON**

The third-year and fourth-year Chemical Engineers have chosen lovely Lorie Hodgson as their candidate for Queen of the Engineers' Ball for 1955.

Lorie, a petite 5'4" blonde, has a fair complexion, with freckles that add to her charm, sparkling deep blue eyes and a friendly smile. She first came to Edmonton when she was born here 18 years ago and spent her high school days at Garneau, where her interests were many and varied.

A very active girl, Lorie enjoys all sports and particularly goes for basketball and football games. She likes good music, weekends and hot-dogs. Dancing is her favorite indoor sport and she is looking forward to the coming ball. Her marks in first-year psychology show that she isn't letting her college education interfere with her studies.

If you want the Queen of the Engineers' Ball to be one with talent, beauty (that isn't just skin deep), and with a radiant personality, you won't be sorry if you vote for Lorie this Friday.



**CAROLE MILLARD**  
Civil's Queen Candidate

# QUEEN CA

**BARBARA BEDDOME**

The third-year and fourth-year Petroleum Engineers take pleasure in introducing Barbara Beddome as their candidate for Queen of the Engineers' Ball.

Barb was born right here in Edmonton, and the capital city may well be proud of having such a genuinely lovely lady. Brunette hair and sparkling brown eyes enhanced by a winning smile just seem to fit in naturally with Barbara's friendly personality.

She is presently enrolled in the first year of arts and science and is specializing in psychology. She enjoys both popular and classical music, likes dancing and has a preference for high-heeled shoes and nice clothes. Barbara is the girls' sports representative on the ASUS executive this year, is active in WAA and was a member of the U of A golf team. She is particularly interested in figure skating, golf, basketball and volleyball.

The high point in social activities of the university year has always been the Engineers' Ball. Perhaps nothing has contributed more to the attainment of that place of honor than the crowning of our queen. Let us make the seventeenth annual Engineers' Ball the biggest yet, and may the queen be as proud of the Engineers as we will be of her.



**LORIE HODGSON**  
Third and Fourth Year Chemical's Candidate

**CAROLE MILLARD**

The Civils' choice for Engineers Queen of 1955 is lovely Carole Millard. Carole, a first year B.Sc. Nurse, hails from Calgary where she went to Central High School, and later to Tech. where she took commercial art. She is 5'6" tall, has hazel eyes, and a wonderful smile that should catch the eyes of all the Engineers.

She likes cooking, commercial art, driving, watching football, and listening to music. Her favorite sports are badminton, basketball, and skiing.

While in high school, Carole was very active in the school paper and was art editor for the yearbook. Presently, her activities include being president of the Delta Gamma pledge class and of course a very strong interest in Engineering and the Engineers.

You can't go wrong, fellas, if you vote Carole for Queen of the Seventeenth Engineers' Ball.

# SEVENTEENTH ANNUAL



# CANDIDATES

## ENGINEERS' BALL

### DIANNE DIXON

A radiant 5'4" brunette with sparkling green eyes and a bubbling personality is the second-year Engineering candidate for Queen of the 1955 Engineers' Ball. She is Dianne Dixon, a pretty freshette in B.Sc. Nursing.

Dianne was born in Peterborough, Ont., on Aug. 27, 1937, and a more pleasant surprise no parents could have received. After spending eight years there and four years in Ottawa, the Dixons moved to Edmonton. In Edmonton, Dianne went to McKay Avenue school before spending three years at Victoria High, from which she graduated last June.

Her chief athletic interest is swimming, in which she excels. For the last two summers she has been teaching swimming at Tactical Air Command as well as helping with the *Journal's* annual "learn-to-swim" campaign. She likes children and says that teaching 130 of them to swim last summer was the most fun she ever had, although, as she said, "It most definitely is not a soft job." Among her other interests are volleyball, tennis, badminton, and travelling. She wants some time to take a trip around the world. Incidentally, she also loves to cook and sew and is especially happy when she can cook something different from the usual Canadian dish. She is also musically inclined and has composed several descriptive pieces for the piano. She loves Jackie Gleason music for dancing and also likes singing.

So, fellows, when you vote for the queen, vote first for a real queen, DIANNE DIXON!



DIANNE DIXON  
Second Year Queen Candidate



BERNIECE DONAIS  
First Year Queen Candidate

### JOAN CLARK

The Electrical Engineers' candidate for queen is Joan Clark. Joan possesses all the qualities that are so necessary for a queen—vibrant personality, beauty and an active interest in campus life. It is these factors that make the Electrical Engineers feel that she will be your choice as well as theirs.

A second-year home economics student, 19-year-old Joan comes from Calgary. She is very talented in cooking and sewing, and in the line of music she plays the piano extremely well. Joan enjoys all sports, particularly skiing, skating and swimming, while football is her favorite spectator game.

When you first meet Joan you cannot help being impressed by her bright smile and sunny disposition. Her five feet six, topped by brown eyes and brunette hair, makes everyone stop and take a second look. While attending St. Mary's high school in Calgary she was chosen Miss Valentine, an understandable choice.

Joan is very active and has many friends on the campus. Last year she was on the Evergreen and Gold staff and now serves as president of the Home Economics club. It is difficult to imagine anyone more suitable than Joan to be crowned Queen of the Engineers' Ball.

### BERNIECE DONAIS

Berniece Donais, first-year Engineering queen candidate, was born 20 years ago in the thriving metropolis of Rabbit Lake, Saskatchewan. Now enrolled in Physiotherapy, she received her pre-varsity schooling at St. Mary's high school in Edmonton. During her high school career she was elected vice-president of the Students Council and president of the city inter-high school Red Cross council. She was busy in teen clubs, drama, and was also the editor of the school paper.

This 5'4" grey-eyed beauty, besides being an excellent student, likes both popular and classical music, plus dancing with the only men on the campus, Engineers, of course. Her main interests are playing the piano, watching football and basketball games, and various sports such as swimming, skating, golf, tennis, and admiring Engineers. After graduation, she intends to work in Edmonton for two years and then travel to Europe.

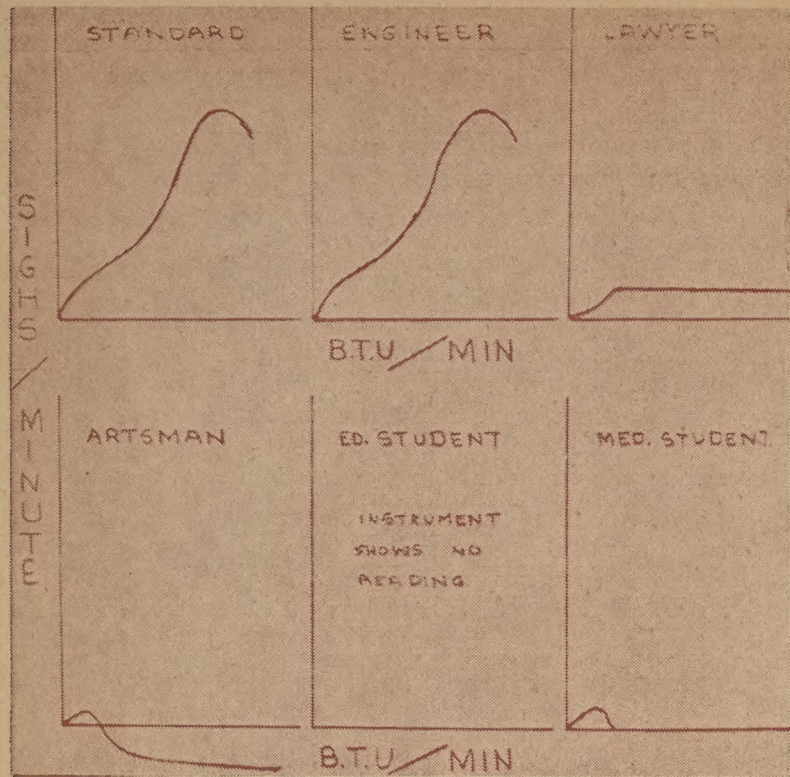
If you want the Queen of the Ball to combine talent, beauty, vivacious personality, you can't go wrong in voting for Berniece Donais this Friday, Jan. 28, 1955.



JOAN CLARK  
Electrical Engineer's Queen Candidate

—Photos by MarDon Studios





# SCIENTIFIC INVESTIGATION

OBJECT: To prove once and for all that Engineers are not half-sexed.

APPARATUS:

1. 26 ounces of lemon gin
2. One nurse (U of A variety)
3. One Engineer
4. One artsman
5. One lawyer
6. One ed student (male)
7. One med student
8. Sigh-o-meter (three-division passion variety)
9. Love-o-meter

PROCEDURE:

Feed the nurse the lemon gin. The experimenter will then make love to the nurse after a noticeable flush of passion has appeared on her face (due to the gin). Attach the sigh-o-meter to the nurse's left ear lobe and the BTU lov-o-meter of the experimenter's right arm (high enough not to hamper movement). It is noted that the BTU lov-o-meter measures the "loving output" of the male species. Readings should be taken every three minutes. Light and proximity of a third person have a diverse effect on the experiment, hence caution is necessary when making readings.

After a suitable numbre of observations, allow the nurse sufficient time to sober up (three days should be sufficient). Repeat the procedure with members of the various other faculties. ONLY THIS TIME OMIT THE GIN.

By plotting the readings of the

## ELECTION PROCLAMATION

Hear ye! Hear ye!

Be it known to all and sundry, and Engineers in particular, that the election for the choosing of an Engineers' Queen will take place on Friday, Jan. 28, 1955, as hereinafter set forth:

1. Balloting will take place between the hours of eighty-thirty in the morning and four-thirty in the afternoon.
2. Polls will be in the basement of the Engineering building on the campus of the University of Alberta.
3. All bona-fide members of the Engineering Students' society, upon presentation of their ESS cards, will be eligible to vote.
4. Any members of the faculty of arts and science, faculty of medicine, faculty of law, faculty of agriculture or any other minor groups who may stray within sight of the polls on the aforementioned day, do so at their own risk. The Engineering Students' society takes no responsibility for any injuries or drownings sustained.

lov-o-meter on the abscissa and the readings of the sigh-o-meter on the ordinate, we obtain six different curves. The first graph now gives us a standard curve for ultimate passion. (It is a well-known medical fact that gin will produce this in the female of the species.)

A direct comparison of the other curves with this standard shows

See "INVESTIGATION" Page 7

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## Sine Of Love

I saw her as a most beautiful conglomeration of ellipses, parabolas and sine waves in perfect symmetry as she slithered into the living room. I sat confidently on the sofa sketching free body diagrams as she sat down beside me. I felt the firm pressure of her thigh against mine. I would judge its modulus of resilience to be about 0.034 in. lb. I felt her warm breath (approx. 102.4° F.) on my cheek as she said, "Have I kept you waiting long, Xerxes?"

"Only 34 minutes and 16.2 seconds," I replied as I subconsciously estimated the tensile strength of her sweater to be at least 4,000 psi. She ran her soft hand through my hair (generating some  $3 \times 10^6$  statcoulombs) and asked "What did you bring me?" as she eyed the long object in my pants pocket. . . . "Oh," I said quickly, "that's not for you; that's my slide rule," as I withdrew it and dramatically and adeptly flicked the ash from her cigarette with the slide.

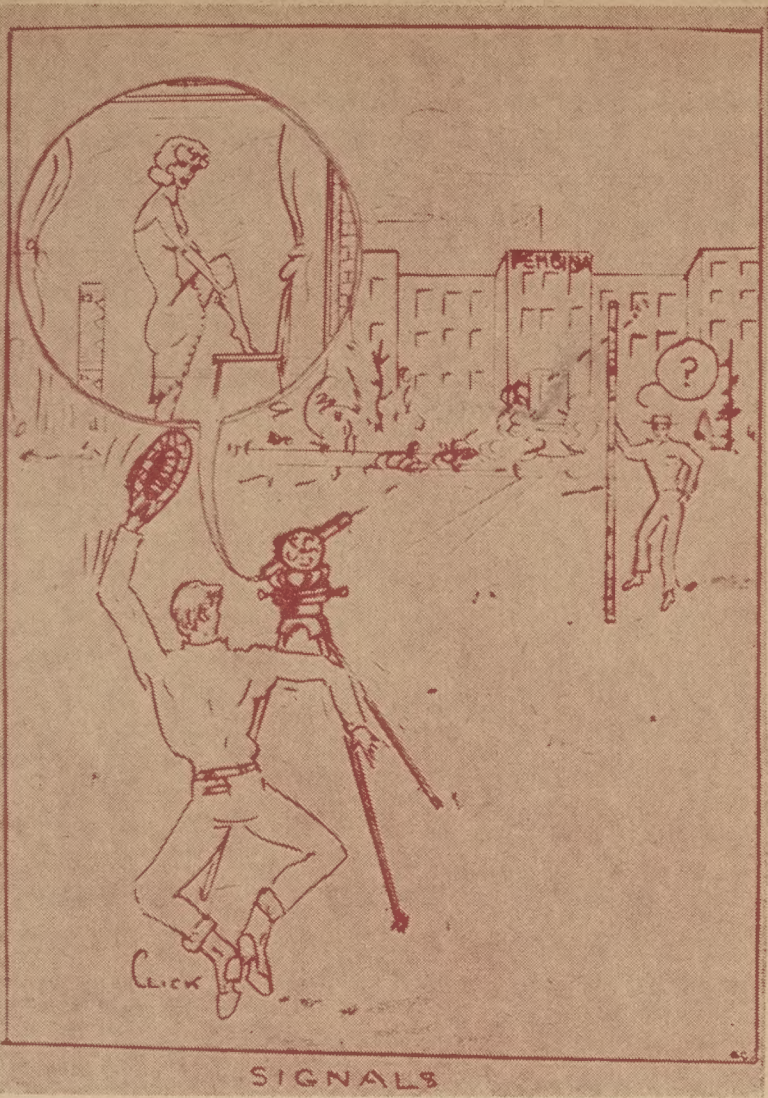
"Are all Engineers as strong, calm and romantic as you are, Xerxes?"

I was mentally computing the acceleration of my heartbeat to be at least 14.7 thumps/sec./sec.

"Of course they are! Ask any of the many nurses on the campus who thought they were disappointed earlier this year," I said as I thought: Engineers . . . romantic? Even I had learned in C.E. 13 that a woman is nothing but a slow-moving man with a lower specific heat and a higher centre of gravity. She might hypnotize the lawyers with her curvilinear attractions, but not me—an Engineer.

I observed her coldly (114.7° F.). She leaned over and kissed me lightly. I glanced down at my lapel, only to see a molten mass that had once been my ESS pin. She watched in admiration as I casually put the lighted end of my cigarette in my mouth and blew the smoke from between my toes.

I rose with a masculine air of indifference and stalked from the room on my hands.



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## On Gateway Poetry . . .

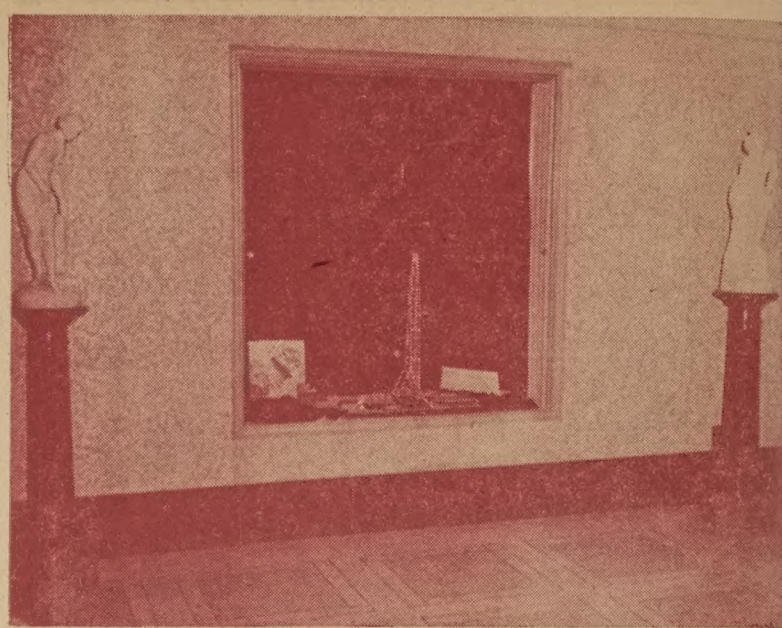
The Gateway, typical of undergraduate papers run mostly by arts-men, lawyers and their ilk, encourages budding poets. In their desperate attempts to be modern, they like to write disillusioned verses with jagged edges about the deceit and bitterness of life. Unfortunately, having neither the artistry of those they imitate nor the virility of the Engineer, they present us a husk of useless and meaningless words only too truly reflecting their way of life.

For their benefit the Engineers provide the following model from "Table Talk of Samuel Marchbanks" by Robertson Davies, who, if not an Engineer, has been similarly revolted by such poetic garbage as that which we are forced to stomach in The Gateway. . . .

Engineer for the ASSUS.  
Disillusion  
Ugh!

Take it away!  
Life—the thirty-cent breakfast—  
Offered to the vomiting man  
In the vast hangover,  
The World.  
Onward I reel  
Till fate—the old whore—  
Loose or costive,  
Drops me in the latrine of Oblivion,  
Plop!

This little poem might indicate that the Engineers had lost all faith



## "LIBRARY DISPLAYS IMPROVE"

The Petroleum Engineers have taken over all five showcases in the ground floor rotunda of the library. These displays include models of two complete drilling rigs, a pumping station and numerous pamphlets describing the various phases of work in the oil industry.

The rig pictured above is National 75, built for last year's Engineers' Ball, and was the winning entry in the competition among the different branches of Engineering for the Godiva Goblet. In the showcase on your left as you enter the rotunda by the main door is an oil well 133-B service rig which was made two years ago for the ball and has been preserved for use in displays such as this.

When you have viewed the display you have the feeling that you have seen a truly educational display about an important Alberta industry. It also brings to mind two displays shown last term by the lawyers.

Our talkative friends' first presentation waws a Safeway grocery cart; the second consisted of two crudely penned signs placed on the Christmas tree. Both times they had to force their way into the showcase to set up their exhibits(?).

There is no reason at all why Miss Sherlock should have to accept comments like those thrown at her by these nincompoops in their Christmas left under the tree, then in the library rotunda. The type of humor exhibited was of the calibre generally associated with children of pre-Boy Scout age.

Now that the Engineers have shown you the way, lawyers, can you grow up for a while and show us some real reason for your existence on the campus?

The artist kissed his pretty model and she was upset over his boldness until he assured her she was the first model he had ever kissed.

"How many models," she asked, "did you have before me?"

"Four," replied the artsman, "an apple, two oranges and a flower pot."

in the lawyers. Although a worthy thought, don't accept this as representative of the whole faculty, but it

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Monday, January 31st

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